

CLAIMS

1. A material, preferably but not exclusively bi-phasic constituted by a solid matrix with pores or molecular interstices filled by a fluid, to protect the gum and/or tooth and/or periodontal tissues from the traumatizing collision of the food during the mastication.
2. A material, as defined by claim 1, that also allows the controlled and continued delivery of drugs and/or others substances.
3. A material, as defined by claim 2, for controlled and continued delivery of drugs and/or others substances in the pharyngeal and/or nasal cavity.
4. A material, as defined by the claims 1-3, allowing controlled and continued delivery of antibiotics.
5. A material, as defined by claim 4, allowing controlled and continued delivery of rifamycin.
6. A material as defined by the claims 1-3, for controlled and continued delivery of melatonin and/or serotonin and/or nicotine and/or mineral salts and/or vitamins and/or antacid substances.
7. A material as defined by the claims 1-3, for controlled and continued delivery of a salt of fluorine (preferably but not exclusively sodium mono-fluoride-phosphate and/or sodium fluoride) and/or calcium and/or magnesium.
8. A material as defined by the claims 1-3, for controlled and continued delivery of sodium hydroxide and/or sodium bicarbonate.
9. Method for controlled and continued delivery of rifaximin from a material adapted to the purpose of holding it in the place of somministration, avoiding its fast and un-controlled dispersion in the neighboring tissues in form of small crystals.
10. Method for controlled and continued delivery of rifaximin without the generation of the unaesthetic an intense red coloration.
11. Method for controlled and continued delivery of rifaximin without the generation of the unaesthetic an intense red coloration, in the oral or pharyngeal or nasal cavity, in the rectum and in the vagina, and from the surface of catheters.
12. Method for controlled and continued delivery of rifaximin by means of a material as defined by claims 1-3.

13. Method for controlled and continued delivery of rifaximin, as defined by claims 9-12, by means of a bi-phasic material, elastic and able to absorb fluid in its pores or molecular interstices.
14. Method for controlled and continued delivery of rifaximin, as defined by claims 9-13, the bi-phasic material, being of benefit for teeth, for the periodontal tissue, for the gum and for the others tissues and organs of the oral cavity.
15. Method for controlled and continued delivery of rifaximin, as defined by claims 9-14, the rifaximin being delivered together with other anti-inflammatory and/or cortisone-based drugs and/or antibiotics and/or antiseptic and/or pain-relief and/or 10 anesthetics and/or anticoagulants.
16. Method for controlled and continued delivery of rifaximin, as defined by claims 9-15, the rifaximin being in association with other antibiotics such as amoxicillin and/or streptomycin and/or penicillin.
17. Method for controlled and continued delivery of rifaximin, as defined by claims 9-14, rifaximin being in association with an anti-viral drug, preferably but not exclusively, such as Ribavirin.
18. Method for controlled and continued delivery of rifaximin, as defined by claims 9-14, rifaximin being delivered in association with other drugs or substances such as nimesulide and/or the acetylsalicylic acid and/or cloredicina.
19. Method for controlled and continued delivery of rifaximin, as defined by claims 9-18, characterized by the fact that rifaximin is deposited on the external or internal 20 surface of a catheter.
20. Method for controlled and continued delivery of rifaximin, as defined by claims 9-18, characterized by the fact that rifaximin is associated to a medical device.
21. Method for controlled and continued delivery of rifaximin, as defined by claims 9-18, characterized by the fact that rifaximin is applied to skin and/or to dermis and/or to other tissues or organs.
22. Method for controlled and continued delivery of rifaximin, as defined by claims 9-18, by means of a periodontal pocket.
23. Method for controlled and continued delivery of rifaximin, as defined by claims 11, 30 characterized by the fact that a material is used, preferably but not exclusively in

oval shape or in a shape of a candle, equipped by a string, or by others means, for its recovery at the end of the use.

24. Method for controlled and continued delivery of rifaximin, as defined by one of the claims 9-23, by means of a material as defined in claims 1-8, for veterinary use.
- 5 25. A material or drug delivery system, as defined by one of the claims 1-8, characterized by the fact to have among its components at least one of the following materials: hydrophilic polymers, poly-electrolyte polymers, polymers with carboxylic and/or amino groups, acrylic polymers, polymers and co-polymers of jaluronic acid and other polymers like: polysaccharides (xanthan, guar and similar), cellulose-derivatives, cellulose-cellulose, hydroxy-alkyl cellulose, poly-vinyl-sulfonates, polyacrylates, poly-acrylammides and similar, poly-carboxylates of vinyl and hydroxy-propyl-methyl cellulose.
- 10 26. A material or drug delivery system, as defined by one of the claims 1-8, characterized by the fact to be obtained, or to be synthesized, through cycles of freezing and thawing, preferably but not exclusively in an interval of temperature comprised between +20°C and -90°C.
- 15 27. A material or drug delivery system, as defined by one of the claims 1-8, characterized by the fact to be obtained, or to be synthesized, by means of a process of partial or total, lyophilization, that is: dehydration, partial or total, through freezing and successive lowering of pressure in order to provoke the subliming of the ice to the inside of the prepared solution.
- 20 28. A material or drug delivery system, as defined by one of the claims 1-8, characterized by the fact to be obtained, or to be synthesized, by means of a process of partial, or total, dehydration or drying process.
- 25 29. A material or drug delivery system, as defined by one of the claims 1-8, characterized by the fact to be obtained, or to be synthesized, by means of chelating induced by means of divalent or multivalent salt or metal ions.
- 30 30. A material or drug delivery system, as defined by one of the claims 1-8, characterized by the fact to contain an adhesive polymer such as: silicones polymers, poly-isobutylene, acrylic polymers, poly-oxyethylene, Polycarbophil, Carbopol, hydroxy-propyl-methyl-cellulose, carboxy-methyl-cellulose, hydroxy-

propyl-cellulose, hydroxy-ethyl-cellulose, Guar rubber, alginates; drum-dried waxy maize starch.

5 31. A material or drug delivery system, as defined by one of the claims 1-8, characterized by the fact to be applied in place by pressing it onto the surface of interest in order to guarantee its stability and the effectiveness of the release of the substances contained in it.

10 32. A material or drug delivery system, as defined by one of the claims 1-8, characterized by the fact to have an adhesive element on the external surface, protruding beyond it, in order to be applied in place by attaching itself to the neighboring tissue to guarantee the effectiveness of the release of the substances contained in it.

15 33. A material or drug delivery system, as defined by one of the claims 1-8, characterized by the fact to have a bi-adhesive element (adhesive from both the faces) in order to be applied in place by attaching itself to the neighboring tissue to guarantee the effectiveness of the release of the substances contained in it.